



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,688	03/01/2002	Quock Ying Ng	STL10351	4885

7590 07/01/2003

Shawn B Dempster, Seagate Technology LLC  
Intellectual Property - SHK2LG  
1280 Disc Drive  
Shakopee, MN 55378-1863

EXAMINER

DAVIS, DAVID DONALD

ART UNIT	PAPER NUMBER
----------	--------------

2652

DATE MAILED: 07/01/2003

3

Please find below and/or attached an Office communication concerning this application or proceeding.

91

## Office Action Summary

**Application No.**

10/087,688

**Applicant(s)**

NG ET AL.

**Examiner**

David D. Davis

**Art Unit**

2652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Art Unit: 2652

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. Receipt is acknowledged of the Information Disclosure Statement (IDS) received March 1, 2002.

### ***Specification***

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2652

5. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Albrecht et al (US 6,160,686) in view of Boutaghou et al (US 6,122,130). Albrecht et al shows a ramp 32 that includes at least one ramp surface for releasable engagement with a tab 34 characterized by a tab hardness. In column 7, lines 37-48 of Albrecht et al disclose a body molded from a compound formulation consisting essentially of a polymer and embedded particles away from the ramp surface considered to have the same hardness as the tab hardness.. The polymer of Albrecht et al is characterized by a polymer surface tension.

Albrecht et al, however, is silent as to the ramp including a liquid that is chemically incompatible with the polymer with the liquid being in the form of droplets that are distributed in the polymer.

Boutaghou et al shows in figure 3 a ramp including a liquid that is chemically incompatible with the polymer with the liquid being in the form of droplets that are distributed in the polymer.

The liquid of Boutaghou is characterized by a liquid surface tension that is lower than the polymer surface tension. The liquid of Boutaghou et al is further characterized by a viscosity that facilitates travel of the droplets in the polymer. Irregularities are formed by the droplets of Boutaghou et al traveling to the ramp surface.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide the ramp of Albrecht et al with a liquid that is chemically incompatible with the polymer with the liquid being in the form of droplets that are distributed in the polymer as taught by Boutaghou et al. The rationale is as follows: one of ordinary skill in the art at the time the invention was made would have been motivated to provide a ramp with a


Art Unit: 2652

liquid that is chemically incompatible with the polymer with the liquid being in the form of droplets that are distributed in the polymer so as to produce a effective and optimized coefficient of friction.

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Davis whose telephone number is (703) 308-1503. The examiner can normally be reached on Mon., Tues., Thurs. and Fri. between 7:30-6:00. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900. Any other inquiry should be directed to the customer service center whose telephone number is (703) 306-0377.

  
David D. Davis  
Primary Examiner  
Art Unit 2652

ddd  
June 16, 2003